Standard Indicators
SCIENCE 8.2.4-8.2.5

Planet Distance Discovery

Purpose

Students will use technological devices to perform calculations of the distance between Earth and the other planets. Students will also use computers to store and retrieve information, and will create a simple file of the students own devising.

Materials

For the teachers: none
For the students: access to the Internet, access to spreadsheet software, graphing calculators

Activity

A. Pre-Activity Discussion

1. Have students take out scrap paper and estimate how far they believe the nearest planet is from us.
2. Share and discuss estimates.
3. If a limited number of computers are available, divide students into groups of 2 or 3. Or, if possible, have each student work individually.
4. Direct students to go to *Windows to the* Universe at http:// www.windows.ucar.edu/tour/link=/kids_space/distance.html.

B. Description of Activity

1. Using *Windows to the Universe,* student will read through the information to discover the actual distances between the planets and the Earth.
2. Students will create a paper with the following columns:
   - Name of planet
   - Distance in AU (Astronomical Unit)
   - Distance in kilometers
3. Using the information on the web, students will record the name of the planet and the AU.
4. Using a graphing calculator, students will convert the AUs to kilometers.
5. Using spreadsheet software, students will input the data. Students will sort the data alphabetically or numerically.

Classroom Assessment

Students will print and submit their electronic file for evaluation.

Technology Literacy Standards

	I	II	III	IV	V	VI	VII
1	X			X			X
2	X	X					
3							
4	X						
5		X					
6				X			
7				X			
8				X		X	
9				X			
10							
11							
12							
13						X	
14						X	
15							
16							

X = This Technology Literacy Standard is addressed in this lesson.

☐ = This Technology Literacy Standard is not addressed in this lesson.